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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/647,966	08/26/2003	Friedrich Siebers	NY-SCHT 216.1-US	2851	
24972 7	590 12/06/2004		EXAM	EXAMINER	
FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE			VINCENT, SEAN E		
00011111	NY 10103-3198		ART UNIT	PAPER NUMBER	
			1731		
			DATE MAIL ED: 12/06/2004	DATE MAIL ED: 12/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application	No.	Applicant(s)	\			
	10/647,966	;	SIEBERS ET AL.	A)			
Office Action Summary	Examiner		Art Unit				
	Sean E. Vin	cent	1731				
The MAILING DATE of this communication Period for Reply	appears on the	cover sheet with the c	correspondence address				
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, and If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by some Any reply received by the Office later than three months after the meaned patent term adjustment. See 37 CFR 1.704(b).	DN. R 1.136(a). In no event n. a reply within the statuto eriod will apply and will o tatute, cause the applic	t, however, may a reply be tin ory minimum of thirty (30) day expire SIX (6) MONTHS from ation to become ABANDONE	nely filed is will be considered timely. the mailing date of this communi D (35 U.S.C. § 133).	cation.			
Status							
1) Responsive to communication(s) filed on _							
	——· This action is no	n-final.					
	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213,							
Disposition of Claims							
4)⊠ Claim(s) <u>22-24</u> is/are pending in the applic	ation.						
4a) Of the above claim(s) is/are with		sideration.					
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>22-24</u> is/are rejected.							
7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction ar	nd/or election red	juirement.					
Application Papers							
9)☐ The specification is objected to by the Exan	niner.			•			
10)⊠ The drawing(s) filed on <u>26 August 2003</u> is/a		ed or b)□ objected t	to by the Examiner.				
Applicant may not request that any objection to		· •	•				
Replacement drawing sheet(s) including the co				21(d).			
11)☐ The oath or declaration is objected to by the		-,,		` '			
Priority under 35 U.S.C. § 119							
<u> </u>	-1	05110000440()	(1) (0)				
12)⊠ Acknowledgment is made of a claim for fore a)⊠ All b)⊡ Some * c)⊡ None of:	eign priority unde	er 35 U.S.C. § 119(a)	)-(d) or (f).				
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The second secon			om No. 10/000 004				
<ul> <li>2. Certified copies of the priority documents have been received in Application No. 10/068,804.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>							
application from the International Bu			a in this National Stage	•			
* See the attached detailed Office action for a			rd.				
222 222 2222 2232 2330 2330 2330 23	s. s. are corum	- Sopios not receive					
Attachment(s)							
1) Notice of References Cited (PTO-892)	Δ	)  Interview Summary	(PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)		Paper No(s)/Mail Da	te				
3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date	•	)	atent Application (PTO-152)				
J.S. Patent and Trademark Office	e Action Summary	,	rt of Paper No./Mail Date 200	41202			

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 3. Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Babcock et al (US 4285728) in view of Okamoto (JP B2 07-37334).
- 4. Babcock et al taught methods of forming lithium-aluminum-silicate glasses into parabolic telescope mirror blanks and heat treating the glass to form beta-eucryptite and beta-spodumene (see figures and examples, especially col. 28, line 28 to col. 29, line 2 and the claims). Babcock et al taught casting of shapes that were ground to the appropriate parabolic curvature. Babcock et al did not teach pressing molten glass with a smooth surfaced ram into a parabolic contour. Okamoto taught pressing of "reflection mirror substrates" from lithium-aluminum-silicate glasses and heat treating the glass to form beta-eucryptite and beta-spodumene such that a

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smooth surface was produced (see English language translation provided by the applicant, page 3, lines 35-38; page 4, lines 1-25 and pages 5 and 6 in their entirety). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to directly press the parabolic mirror substrates of Babcock et al such as in Okamoto because Okamoto taught that it avoided difficult and costly grinding or polishing steps. Likewise, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to expect the mirror substrates of Okamoto to have a parabolically contoured surface because Babcock et al taught that such shapes were useful in telescope mirrors.

5. With regard to claims 23 and 24, Okamoto specifically states times and temperatures in the examples which fall in the claimed ranges. Furthermore, Babcock et al and Okamoto each provided ample suggestive matter to permit a person of skill in the art to determine heat treatments for the particular proportion of crystalline content desired.

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## Conclusion

- 6. The prior art made of record and not relied upon is cited to further show the state of the art.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean E. Vincent whose telephone number is (571) 272-1194. The examiner can normally be reached on M F (8:30 6:00).
- 8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on (571) 272-1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.
- 9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9/197 (toll-free).

Sean E Vincent Primary Examiner Art Unit 1731

S Vincent Thursday, December 02, 2004